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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,591	01/18/2002	Ray Richards	3918-0136P	7115
2292	7590	10/02/2003	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			COLLINS, TIMOTHY D	
			ART UNIT	PAPER NUMBER
			3643	

DATE MAILED: 10/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/050,591	RICHARDS, RAY
	Examiner Timothy D Collins	Art Unit 3643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 28 July 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 21-30 is/are withdrawn from consideration.
- 5) Claim(s) 18-20 and 31 is/are allowed.
- 6) Claim(s) 1-16, 32 and 33 is/are rejected.
- 7) Claim(s) 17 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ .
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .	6) <input type="checkbox"/> Other: _____ .

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Canada on 01/19/2001. It is noted, however, that applicant has not filed a certified copy of the Canadian application as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5,8-10, and 16 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by USPN 4962978 to Weston (hereinafter called 978).

a. Re claim 1, 978 discloses the claimed invention at least in figure 1 and also in column 2 at lines 2-5 (this discusses the wing as the floatation device for the craft).

b. Re claim 2, 978 discloses a horizontal stabilizer (23), adapted to provide additional support for maintaining the fuselage above and out of the water. This is seen at least when the craft is moving.

- c. Re claim 3, 978 discloses that the main wing has a leading and trailing edge and the trailing edge is immovable relative to the main wing as seen in figure 2 at approximately where the number 14 is printed in the figure.
- d. Re claim 4, 978 discloses that the wing has a positive dihedral in figure 4 and also in column 2 at lines 2-5.
- e. Re claim 5, 978 discloses the claimed invention at least in figure 4.
- f. Re claim 8, 978 discloses that the propulsion means is located above the wing, in at least in figure 1 at 13.
- g. Re claim 9, 978 discloses inherently that the seaplane has a center of gravity and a center of hydro-dynamic pressure. It also discloses inherently that the CG is located aft of the center of hydro-dynamic pressure, or else the aircraft would sink while attempting to hydroplane.
- h. Re claim 10, 978 also discloses inherently that the CG is located on the plane of symmetry and on or vertically above the main wing. This is because the CG is on the center line of the aircraft and the wing is on the bottom of the aircraft therefore the CG must be above the wing at some point along the wing.
- i. Re claim 16, 978 discloses that the horizontal stabilizer is above the water at the time of takeoff and landing as seen at least in figure 4.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6,7, 11-15 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 4962978 to Weston (hereinafter called 978) as applied above.

j. Re claim 6, 978 may not specifically disclose that the wing has a dihedral angle of about 10 to about 20 degrees but it would have been obvious to make the angle between 10 and 20 degrees for the purpose of greater hydroplaning efficiency and less drag while taking off. Also for the purpose of optimization of the vehicle

k. Re claim 7, 978 may not specifically disclose that the wing has a dihedral angle of about 15 degrees but it would have been obvious to one of ordinary skill in the art to make the angle of about 15 degrees for the purpose of greater hydroplaning efficiency and less drag while taking off. Also for the purpose of optimization of the vehicle.

l. Re claims 11 and 12, 978 may not specifically disclose that the CG is spaced from the leading edge by half the width of the main wing or that it is at the trailing edge of the wing, however it would have been obvious to one of ordinary skill in the art to have placed the CG in any place that would result in the best

performance, through routine testing and experimentation. The CG would be placed so as to allow for the best handing in the air as well as on the water.

m. Re claims 13-15, 978 may not specifically disclose that the horizontal stabilizer is two sections and that it has elevons on it which pivot independently up and down relative to the horizontal stabilizer, however elevons are old and well known in the art. Therefore it would have been obvious to one of ordinary skill in the art to have used elevons so as to increase the maneuverability of the aircraft as is common in fighter aircraft.

n. Re claim 32, 978 discloses a fuselage, and propulsion device, as well as a main wing to provide lift in flight, and also a stabilizer (see rejection of claim 1 above). However 978 may not specifically disclose that the airplane is characterized by an absence of pontoons, but it is old and well known in the art that aircraft may not have pontoons even if they are to land on water, as they merely provide stability in 978 while on the water. Therefore it would have been obvious to one of ordinary skill in the art to have made the aircraft without pontoons so as to decrease stability for the known purpose of increasing maneuverability. This is seen because aircraft and watercraft become more maneuverable when they are less stable as is seen by fighter aircraft and race boats.

6. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 4962978 to Weston (hereinafter called 978) as applied above and further in view of WO 95/00386 (hereinafter called 386). 978 may not specifically disclose that the horizontal

stabilizer provides floatation while on the water, however 386 teaches of this as seen in figure 4a while the craft is in the water the stabilizer 65 inherently provides some floatation. Therefore it would have been obvious to one of ordinary skill in the art to have applied the teachings of 386 into the device of the 978, so as to provide extra floatation to the craft and to aid in the climb out of the water during takeoff as seen in 386.

Claim Objections

7. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 21-23 have been renumbered as claims 31-33.

Also, note if you wish to cancel claims 21-30 which have been withdrawn, you must specify this in an office action, and provide the clean copy in the next action with all of the above information in the new format.

Allowable Subject Matter

8. Claim 17 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
9. Claims 18-20 and 31 are allowed.

Response to Arguments

10. Applicant's arguments with respect to claims 1-20 and 31-33 have been considered but are moot in view of the new ground(s) of rejection. See rejections above for explanations.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy D Collins whose telephone number is 703-306-9160. The examiner can normally be reached on M-Th, 7:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on 703-308-2574. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-4180.

tdc
October 1, 2003


PETER P.
SUPERVISOR
TECHNICAL CENTER 3643